

NOAA HURRICANE HUNTER P3 TOUR 2009



NOAA P3 Orion Background

By Jeff Orrock, WCM NWS Raleigh, NC

Two of the world's premier research aircraft, the renowned NOAA WP-3D Orion's, participate in a wide variety of national and international meteorological, oceanographic and environmental research programs in addition to their widely known use in hurricane research and reconnaissance. Data collected during hurricanes by these airborne meteorological platforms are fed into numerical computer models to provide better forecasts of how intense a hurricane will be, and when and where it will make landfall.

These data fulfill two important purposes: to help forecasters make accurate predictions during a hurricane; and to help NOAA researchers achieve a better understanding of storm processes. Slicing through the eye wall of a hurricane, buffeted by howling winds, blinding rain, violent updrafts and downdrafts before entering the relative calm of the storm's eye, NOAA's two Lockheed WP-3D Orion turboprop aircraft probe the very nature of the storm, repeating the grueling experience a number of times during the course of a 9-10 hour mission. In support of scientists from NOAA's Office of Oceanic and Atmospheric Research, Hurricane Research Division, crew members deploy instruments called GPS (Global Positioning System) dropwindsondes as the WP-3D Orion aircraft penetrates the hurricane. These devices continuously radio back measurements of pressure, humidity, temperature and wind as they fall toward the sea, providing a detailed look at the structure of the hurricane and its intensity.

The hurricane awareness tour has been conducted for more than 25 years, alternating between the Gulf and Atlantic coasts, used to focus light on NOAA's hurricane hazard education campaign during national [Hurricane Preparedness Week](#), May 24 to 30. The Atlantic hurricane season runs from June 1 through November 30th.

Hurricane Awareness Tour a Success!

Back in May, NOAA hurricane experts visited five East Coast cities aboard a NOAA hurricane hunter aircraft to raise awareness about storm threats and the danger of being caught without a personal hurricane plan. “We are bringing a life-saving message to coastal communities – now is the time to prepare for a hurricane, before a storm threatens your area,” said Bill Read, director of [NOAA’s National Hurricane Center](#). “Preparing a hurricane plan today could determine whether you become a hurricane survivor or a hurricane victim.”

Hurricane specialists Dan Brown and Robbie Berg, storm surge specialist Jamie Rhome and Read traveled with the crew when the aircraft visits Newington, N.H., Farmingdale, N.Y., Raleigh, N.C., Wilmington, N.C., and Key West, Fla. The public and media were invited to tour the aircraft and speak with the team. Staff from emergency management offices, non-profit organizations such as the American Red Cross, and several local [NOAA National Weather Service](#) forecast offices joined the NOAA team at tour stops.

At each stop the aircraft was greeted in the morning by hundreds of school children and media anxious to get onboard to get a first hand feel of the hurricane piercing plane. Throughout the morning students from local schools were given a featured a presentation on hurricane forecasting and safety, a tour of the NOAA P3 Orion Hurricane Hunter, and various other specialized tours of Civil Air Patrol vehicles as well as other emergency responders such as American Red Cross and Emergency Management.

The success of the 2009 Hurricane Awareness Tour would not have been a success if not for the involvement and dedication of these businesses and agencies.

2009 Tour Schedule:

- Monday, May 4: Pease Air National Guard Base, Newington, N.H.
- Tuesday, May 5: Republic Airport at Farmingdale, N.Y.
- Wednesday, May 6: Raleigh-Durham International Airport, N.C.
- Thursday, May 7: Wilmington International Airport, N.C.
- Friday, May 8: Naval Air Station Key West at Boca Chica Key, Fla.

Pease Air National Guard Base, Newington, N.H.



Raleigh-Durham International Airport, N.C.



Wilmington International Airport, N.C.

Photos: Ed Zirkle



Websites of Interest:

NOAA WP-3D Orion: http://www.aoc.noaa.gov/aircraft_lockheed.htm

NOAA Aircraft Operations: <http://www.aoc.noaa.gov/>

National Hurricane Center: <http://www.nhc.noaa.gov/>